

Patent Claims:

1. Method for operating an electromechanically operable and/or electromechanically lockable parking brake for motor vehicles substantially comprising an operating element (7), an electronic control unit (6), to which are sent wheel speed values from wheel speed sensors (12, 13), at least one unit (1) for generating a brake application force, and electromechanically lockable brake devices (4) on at least one axle, with said brake devices (4) being adapted to be applied by the unit (1),
characterized in that after its activation, the parking brake is driven in a first operating mode when wheel speed values are missing, if the brake devices (4) are not applied, while the parking brake is driven in a second operating mode in a contrary case.
2. Method as claimed in claim 1,
characterized in that the parking brake is driven in a first operating mode if it has been detected already in the previous operating interval that wheel speed values are missing.
3. Method as claimed in claim 1 or 2,
characterized in that the parking brake is driven in a first operating mode if the operator does not assign the second operating mode to the parking brake.

4. Method as claimed in claim 1 or 2,
characterized in that the parking brake
is driven in a second operating mode when the operator
switches off the ignition and actuates the operating
element (7) for a time longer than a predetermined
time.
5. Method as claimed in claim 1 or 2,
characterized in that the parking brake
is driven in a second operating mode when the operator
switches off the ignition and removes the ignition key
from the ignition lock (27) at least for a
predetermined time.
6. Method as claimed in any one of the previous claims,
characterized in that the brake
application force of the parking brake in the first
operating mode is developed and maintained exclusively
during the actuation of the operating element (7), and
in that a maximum admissible force is applied to the
parking brake in the second operating mode upon
actuation of the operating element (7), and release
thereof is possible only by means of a new actuation of
the operating element (7), with the ignition switched
on.
7. Electromechanically operable and/or electromechanically
lockable parking brake for motor vehicles substantially
comprising an operating element (7), an electronic
control unit (6), to which are sent wheel speed values
from wheel speed sensors (12, 13), at least one unit
(1) for generating a brake application force and

electromechanically lockable brake devices (4) on at least one axle, with said brake devices (4) being adapted to be applied by the unit (1), characterized in that a means is provided driving the parking brake, after its activation, in a first operating mode when wheel speed values are missing, if the brake devices (4) are not applied, while the parking brake is driven in a second operating mode in a contrary case.

8. Parking brake as claimed in claim 7, characterized in that a warning lamp (17) is provided informing the operator about whether the parking brake is driven in the first or the second operating mode.